

What is claimed is:

- 1 1. A decanter mooring system comprising:
 - 2 a) a decanter having a discharge orifice, said decanter disposed within
 - 3 a reactor containing a liquid, said decanter adapted to move vertically in
 - 4 relation to the surface of said liquid;
 - 5 b) a discharge conduit connected to said discharge orifice in moveable
 - 6 relationship with said decanter; and
 - 7 c) a stabilizing arm having a first end moveably connected to said
 - 8 reactor and a second end connected to a component selected from the
 - 9 group consisting of said decanter, said discharge conduit, and both said
 - 10 decanter and said discharge conduit, in a manner to limit the lateral
 - 11 movement of said decanter in said reactor.
- 1 2. The system of claim 1 wherein said discharge conduit is a substantially
- 2 rigid, hollow member having at least one hinged section.
- 1 3. The system of claim 1 wherein said discharge conduit is a substantially
- 2 rigid, hollow member having a first hinged section proximate a sidewall of said
- 3 reactor and a second hinged section proximate said decanter.
- 1 4. The system, of claim 1 wherein said discharge conduit is a flexible
- 2 member.
- 1 5. The system of claim 1 wherein the second end of the stabilizing arm is
- 2 moveably connected to the discharge conduit.
- 1 6. The system of claim 1 wherein the second end of the stabilizing arm is
- 2 fixedly connected to the discharge conduit.
- 1 7. The system of claim 1 wherein the second end of the stabilizing arm is
- 2 moveably connected to the decanter.
- 1 8. The system of claim 1 wherein the second end of the stabilizing arm is
- 2 fixedly connected to the decanter.
- 1 9. The system of claim 1 which includes a plurality of stabilizer arms.

- 1 10. The system of claim 9 wherein a first stabilizer arm has its second end
2 connected to the decanter, and a second stabilizer arm has its second end
3 connected to the discharge conduit.
- 1 11. A decanter mooring system comprising:
- 2 a) a decanter having a discharge orifice, said decanter disposed within
3 the reactor containing a liquid, said decanter adapted to move vertically in
4 relation to the surface of said liquid;
- 5 b) a discharge conduit connected to said discharge orifice, said
6 discharge conduit having a first hinged section proximate s sidewall of
7 said reactor and a second hinged section proximate said decanter in a
8 manner such that said discharge conduit is in moveable relationship with
9 said decanter; and
- 10 c) a stabilizing arm having a first end moveably connected to said
11 reactor and a second end connected to said discharge conduit, in a manner
12 to limit the lateral movement of said decanter in said reactor.
- 1 12. The system of claim 11 wherein said second end of said stabilizing arm is
2 moveably connected to said discharge conduit.
- 1 13. The system of claim 11 wherein said second end of said stabilizing arm is
2 fixedly connected to said discharge conduit.
- 1 14. The system of claim 11 which includes a plurality of stabilizer arms.
- 1 15. The system of claim 14 wherein a first stabilizer arm has its second end
2 connected to the decanter, and a second stabilizer arm has its second end
3 connected to the discharge conduit.
- 1 16. A method of mooring a decanter in a reactor, the method comprising the
2 steps of:
- 3 a) selecting a stabilizing arm, the stabilizing arm having first and
4 second ends;

5 b) attaching the first end of the stabilizer bar to a reactor sidewall
6 employing a sidewall attachment, and the second end of the stabilizing arm to a
7 component selected from the group consisting of the decanter using a decanter
8 connection, the discharge conduit using a discharge conduit connection, and both
9 the decanter and the discharge conduit.

1 17. The method of claim 16 wherein the stabilizing arm is connected only to
2 the decanter.

1 18. The method of claim 16 wherein the stabilizing arm is connected only to
2 the discharge conduit.

1 19. The method of claim 16 wherein the stabilizing arm comprises first and
2 second stabilizing arms.

1 20. The method of claim 19 wherein the first stabilizing arm is connected only
2 to the decanter, and the second stabilizing arm is connected only to the discharge
3 conduit.

5